Chemistry

Alphabets

Kit Johnstone Tyabandha, Ph.D.

Alphabet. (Chemical Element)

$$\left\{\begin{array}{cccccccccccccc} a & \bar{a} & \grave{a} & \breve{a} & \hat{a} & \acute{a} & \dot{a} & b & \bar{b} & \grave{b} & \breve{b} & \hat{b} & \ddot{b} & \acute{b} & \dot{b} \\ c & \bar{c} & \acute{c} & \grave{c} & \breve{c} & \hat{c} & \tilde{c} & \ddot{c} & \acute{c} & \dot{c} & \c{c} & d & \hat{d} & e & \grave{e} \\ \dot{e} & f & \breve{f} & \ddot{f} & \dot{f} & g & \acute{g} & \ddot{g} & h & \bar{h} & \dot{h} & \hat{h} & \dot{h} & \ddot{h} & i \\ \tilde{\imath} & \dot{\imath} & j & k & \dot{k} & l & \breve{l} & \dot{l} & m & \bar{m} & \acute{m} & \tilde{m} & \dot{m} & n & \bar{n} \\ \acute{n} & \grave{n} & \hat{n} & \ddot{n} & \acute{n} & \dot{n} & o & \grave{o} & p & \bar{p} & \acute{p} & \grave{p} & \breve{p} & \hat{p} & \acute{p} \\ \dot{p} & p & q & r & \bar{r} & \grave{r} & \hat{r} & \tilde{r} & \ddot{r} & \acute{r} & s & \grave{s} & \check{s} & \hat{s} & \tilde{s} \\ \ddot{s} & \acute{s} & \dot{s} & \dot{s} & t & \grave{t} & \check{t} & \hat{t} & \tilde{t} & \ddot{t} & \dot{t} & u & v & w & x \\ y & \grave{y} & z & \dot{z} & & & & & & & & & & & \end{array}\right\}$$

[a] (Aluminium), [ā] (Astatine), [à] (Arsenic), [ă] (Americium), [â] (Silver), [ắ] (Gold), [ạ] (Argonv), [b] (Boron), [b̄] (Terbium), [b̀] (Bohrium), [b̌] (Berkelium), [b̂] (Barium), [b̈] (Beryllium), [b̋] (Bismuth, [ḅ] (Bromine), [c] (Carbon), [c̄] (Californium), [ć] (Cadmium), [c̀] (Caesium), [c̆] (Curium), [ĉ] (Calcium), [c̃] (Chlorine), [c̈] (Cerium), [c̋] (Copper), [ċ] (Cobalt), [ç] (Chromium), [d] (Dubnium), [d̂] (Dysprosium), [e] (Europium), [è] (Einsteinium), [ẹ] (Erbium), [f] (Fluorine), [f̌] (Fermium), [f̈] (Iron), [ḟ] (Francium), [g] (Gallium), [ǵ] (Gadolinium), [g̈] (Germanium), [h] (Hydrogen), [h̄] (Hafnium), [h̀] (Hassium), [ĥ] (Mercury), [ḣ] (Holmium), [ḧ] (Helium), [i] (Iodine), [ĩ] (Indium), [i] (Iridium), [j] (Lanthanum), [k] (Potassium), [k] (Krypton), [l] (Lithium), [l̆] (Lutetium), [l] (Lawrencium), [m] (Magnesium), [m̄] (Meitnerium), [ḿ] (Mendelevium), [m̃] (Manganese), [ṁ] (Molybdenum), [n] (Nitrogen), [n̄] (Neptunium), [ń] (Neodymium), [ǹ] (Niobium), [n̂] (Sodium), [n̈] (Neon), [n̋] (Nickel), [ṅ] (Nobelium), [o] (Oxygen), [ò] (Osmium), [p] (Phosphorus), [p̄] (Platinum), [ṕ] (Palladium), [p̀] (Lead), [p̌] (Promethium), [p̂] (Protactinium), [p̋] (Plutonium), [ṗ] (Polonium), [p] (Praseodymium), [q] (Actinium), [r] (Rubidium), [r̄] (Rutherfordium), [r̀] (Rhodium), [r̂] (Radium), [r̃] (Radon), [r̈] (Rhenium), [ŕ] (Ruthenium), [s] (Sulphur), [s̀] (Antimony), [s̆] (Samarium), [ŝ] (Seaborgium), [s̃] (Tin), [s̈] (Selenium), [ś] (Silicon), [ṡ] (Scandium), [s] (Strontium), [t] (Titanium), [t̀] (Thorium), [t̆] (Thulium), [t̂] (Tantalum), [t̃] (Thallium, [ẗ] (Tellurium), [ṫ] (Technetium), [u] (Uranium), [v] (Vanadium), [w] (Tungsten), [x] (Xenon), [y] (Yttrium), [ỳ] (Ytterbium), [z] (Zinc) and [z] (Zirconium).

Alphabet. (Base)

$$\{\mathrm{a}\quad \mathrm{c}\quad \mathrm{g}\quad \mathrm{t}\quad \mathrm{u}\}$$

These are respectively adenine, cytosine, guanine, thymine and uracil.

Alphabet. (Nucleic Acid)

$$\left\{\begin{array}{cccccccccc} a & c & d & e & f & g & h & i & k & l \\ m & n & p & q & r & s & t & v & w & y \end{array}\right\}$$

These are words written from the bases. They are namely, [a] (Alanine) (gcu) (gc^2) (gca) (gcg); [c] (Cysteine) (ugu) (ugc); [d] (Aspartate) (gau) (gac); [e] (Glutanate) (ga^2) (gag); [f] (Phenylalanine) (u^3) ($\mathrm{u}^2\mathrm{c}$); [g] (Glycine) ($\mathrm{g}^2\mathrm{u}$) ($\mathrm{g}^2\mathrm{c}$) ($\mathrm{g}^2\mathrm{a}$) (g^3); [h] (Histidine) (cau) (cac); [i] (Isoleucine) (au^2) (auc) (aua); [k] (Lysine) (a^3) ($\mathrm{a}^2\mathrm{g}$); [l] (Leucine) ($\mathrm{u}^2\mathrm{a}$) ($\mathrm{u}^2\mathrm{g}$) (cu^2) (cuc) (cua) (cug); [m] (Methionine) (aug); [n] (Asparagine) ($\mathrm{a}^2\mathrm{u}$) ($\mathrm{a}^2\mathrm{c}$) [p] (Proline) ($\mathrm{c}^2\mathrm{u}$) (c^3) ($\mathrm{c}^2\mathrm{a}$) ($\mathrm{c}^2\mathrm{g}$); [q] (Glutamine) (ca^2) (cag); [r] (Arginine) (cgu) (cgc) (cga) (cg^2) (aga) (ag^2); [s] (Serine) (ucu) (uc^2) (uca) (ucg); [t] (Threonine) (acu) (ac^2) (aca) (acg); [v] (Valine) (gu^2) (guc) (gua) (gug); [w] (Tryptophan) (ug^2) ; and [y] (Tyrosine) (uau) (uac).

Bibliography

Jeremy W Dale and Simon F Park, *Molecular Genetics of Bacteria*, 4^{th} ed., 2004

 ©2014, Kit Johnstone Tyabandha, PhD, 30^{th} January, 2014